

- ① wherein said at least one alternating system is structured and arranged to illuminate the subject matter for first periods of time essentially only said at least one excitation light emitting system, and
 - ② wherein said at least one alternating system is structured and arranged to illuminate the subject matter for second periods of time by said at least one non-excitation light emitting system;
- IV) at least image sensing system, structured and arranged to sense images of the subject matter, comprising,
- ① at least one color CCD inside an endoscope,
 - ② at least three video channels, wherein:
 - 1. at least one of said video channels, which is sensitive to the fluorescence emitted from the subject matter but not to the excitation light, is structured and arranged to differentiate without using any filters or dichroic mirrors between the excitation light and the fluorescence, and transmit only the fluorescence image during such first period of time, and
 - 2. at least two of said video channels are structured and arranged each to transmit at least one such image sensed during such second period of time
- V) at least one superimposing system structured and arranged to superimpose such images sensed by said image sensing system,
- ① wherein at least one such image sensed during such first period of time is superimposed with at least one such image sensed during such second period of time to create at least one such superimposed image; and
- VI) at least one image viewing system structured and arranged to permit viewing such at least one superimposed image.